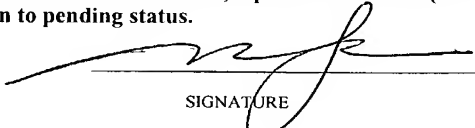


FORM PTO-1390 (REV 10-2000)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER T-10C
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371			U.S. APPLICATION NO. 10/031642
INTERNATIONAL APPLICATION NO. PCT/NL00/00283	INTERNATIONAL FILING DATE May 1, 2000	PRIORITY DATE CLAIMED April 29, 1999	
TYPE OF INVENTION Radiographic Network			
APPLICANT(S) FOR DO/EO/US NEDERHOED, Reinder Eric			
<p>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:</p> <ol style="list-style-type: none"> <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. <input checked="" type="checkbox"/> This is an express request to promptly begin national examination procedures (35 U.S.C. 371(f)). <input type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (PCT Article 31). <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). <input checked="" type="checkbox"/> has been communicated by the International Bureau. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <input checked="" type="checkbox"/> Amendments to the claims of the International Application as under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). <input checked="" type="checkbox"/> have been communicated by the International Bureau. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. <input type="checkbox"/> have not been made and will not be made. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). <input type="checkbox"/> An oath or declaration of the inventors(s) (35 U.S.C. 371(c)(4)). <input checked="" type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). <p>Item 11 to 16 below concern document(s) or information included:</p> <ol style="list-style-type: none"> <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. <input checked="" type="checkbox"/> A FIRST preliminary amendment. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. <input type="checkbox"/> A substitute specification. <input type="checkbox"/> A change of power of attorney and/or address letter. <input checked="" type="checkbox"/> Other items or information: EPO Search Report 			

531 Rec'd FCIT 29 OCT 2001

U.S. APPLICATION NO. 10/031642		INTERNATIONAL APPLICATION NO. PCT/NL00/00283		ATTORNEY'S DOCKET NUMBER T-10C	
17. <input checked="" type="checkbox"/> The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5) : Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO. \$1040.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO OR JPO. \$890.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$740.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$710.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00 ENTER APPROPRIATE BASIC FEE AMOUNT =				CALCULATIONS PTO USE ONLY	
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	9 - 20 =	0	X \$18.00	\$	0
Independent Claims	1 - 3 =	0	X \$84.00	\$	0
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$280.00	\$	
TOTAL OF ABOVE CALCULATIONS =				\$	890.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	
SUBTOTAL =				\$	890.00
Processing fee of \$130.00 for furnishing English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
TOTAL NATIONAL FEE =				\$	890.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$	
TOTAL FEES ENCLOSED =				\$	890.00
				Amount to be Refunded:	\$
				Charged:	\$
a. <input checked="" type="checkbox"/> A check in the amount of \$ <u>890.00</u> to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. _____. A duplicate copy of this sheet is enclosed.					
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO:					
Mark Zovko 36504 28th Avenue South Federal Way, WA 98003 253-838-1909			 SIGNATURE		
			Mark Zovko NAME		
			27849 REGISTRATION NUMBER		

Certificate of Express Mailing – 37 CFR 1.10

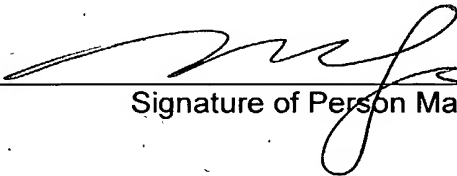
"Express Mail" Mailing Number EK994468063US

Date of Deposit October 29, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addresses" service under 37 CFR 1.10 on the date indicated above and is addressed to Commissioner of Patents and Trademarks, Washington D.C., 20231.

MARK ZOVKO

Name of Person Mailing Paper or Fee


Signature of Person Mailing paper or Fee

10031642 10/03/00

10/031642

531 Rec'd FC/PL 29 OCT 2001

International Application No: PCT/NL00/00283
International Filing Date: 1 May 2000
Priority Date Claimed: 29 April 1999
Applicant: NEDERHOED, Reinder Eric
For: Radiographic Network

Commissioner for Products and Trademarks
Washington, D.C. 20231

Sir:

Please enter the enclosed Preliminary Amendment.

Preliminary Amendment

In the claims please amend claims 3, 5, 7, 8, and 9 as follows:

3. (once amended) Device as claimed in claim 1, wherein the central processor unit is programmed such that it passes a data signal received by the radio receiver to the input / output member when an address associated with the data signal corresponds with the address of the node element.
5. (once amended) Device as claimed in claim 1, wherein at least one data-generating device is connected to the input / output member and the central processor unit is programmed such that in accordance with a determined protocol it addresses and formats data.
7. (once amended) Device as claimed in claim 1, wherein the radio receivers of at least two other node elements are arranged within the range of each radio transmitter of a node element.
8. (once amended) Device as claimed in claim 1, wherein a control device such as a computer is connected to the input / output member.

9. (once amended) Application of the device according to the invention as claimed in claim 1 in horticulture, in particular glass horticulture, wherein an area for monitoring is provided with a pattern of sensors.

Remarks

The preliminary amendment is used to eliminate multiple dependent claims.

Sincerely,



Mark Zovko
Reg. No. 27849
for applicant

October 29, 2001
(253) 838-1909

$$\frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} f(x) e^{-x^2} dx = \frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} f(x) e^{-x^2} dx$$

- 3

RADIOGRAPHIC NETWORK

The invention relates to a device for transferring information which comprises a number of node elements. Such a device can be designated a network.

Each of the node elements has its own address so
5 that information intended for that node element and information originating from that node element can be identified as being associated with that node element.

Networks, particularly those used for transferring digital information between computers, are generally
10 known. These typically comprise direct line connections and/or switched line connections over which the information is transferred. The information is sent along the line connections in accordance with a specified protocol so that each of the node elements can
15 make use of the information.

The laying of line connections is generally quite a costly business, particularly when these line connections have to be arranged between separate buildings. The line connections must then generally be
20 buried in the ground.

This drawback is obviated in the device according to the invention as characterized in claim 1. This network according to the invention operates radiographically so that physical connections between
25 the node elements are not necessary. A data signal is transferred from the one node element to another until the node element is reached for which the data signal is intended.

A further favourable development is characterized
30 in claim 2. This prevents a data signal creating repetitive feedback in the device, whereby proper operation and rapid data transfer could be adversely affected. The data signal will spread through the

operation of the central heating devices in each of the bungalows, but also to remotely switch them on and off and adjust the thermostat thereof. When the bungalow is not occupied, the thermostat can for instance be set

5 remotely to a position at which freezing of pipes is prevented. It is also possible to set the thermostat to a comfortable value some time before the arrival of new guests, so that they arrive to find a pleasantly heated bungalow.

10 Mains power failure can for instance be detected in similar manner. Only one node element need generally be applied per bungalow. All desired information signals and controls can be performed via this node element.

The bungalows in a bungalow park are usually spaced

15 such that it is possible to suffice with one node element per bungalow to ensure a good transmission through the network. In the case of greater distances additional node elements can be incorporated.

Another example of the present invention is the

20 application in climate control in glass horticulture.

Within glass horticulture a system can be developed wherein, on the basis of diverse sensors (about 50 per hectare) in the glasshouse, a picture can be formed of the climatological situation in this glasshouse, such as

25 determining the temperature, relative humidity, CO₂ and so on.

For a uniform growth of the crop it is particularly important to provide a very uniform climate through the glasshouse.

30 According to the invention the differences can be detected and corrected with a network of sensors over the whole area of the glasshouse. Sunblinds, heating equipment and sprinkler installations are for instance actuated subject to the detected differences.

35 The pattern of sensors can be sub-divided into sub-patterns which each co-act with a node element in accordance with the network system of the invention. It

is further possible to group the sensors of the same type, for instance temperature, humidity and CO₂ sensors, which groups report to predetermined node elements, which data is transferred to the relevant computer.

5 The system according to the invention can be extended still further by applying remote mobile control elements or hand terminals which are carried by security or glasshouse personnel, which personnel can immediately report information relating to humidity or plant
10 diseases. In this latter case the member of staff does not need to know his location in the glasshouse at that moment. The position determination can in any case take place with for instance the bar codes on the plants in order to obtain a more precise determination. A less
15 precise position determination takes place as "cross-check", i.e. use is made of the high-frequency signal intensity generated by the hand terminal. This operates as follows:

When the signal from the hand terminal is received
20 by a plurality of node elements, it is possible on the
basis of the signal intensity to roughly determine the
location at which the hand terminal is situated. The
disease symptoms and the associated position
determination reported by the hand terminal herein serve
25 as reference data, for instance for a spraying machine
for pesticides.

Other functions can be given to the hand terminals, for instance a timestamp, so that the activities performed by staff can be registered.

30 The manner in which the different sensors and control elements are connected to the input/output member of the node element and co-act therewith will be obvious to a skilled person in the field and requires no further explanation here.

35

30 5. Device as claimed in any of the foregoing
claims, wherein at least one data-generating device is
connected to the input/output member and the central
processor unit is programmed such that in accordance
with a determined protocol it addresses and formats data

received via the input/output member of the data-generating device and passes it to the radio transmitter.

5 6. Device as claimed in claim 3, wherein at least one data-processing device is connected to the input/output member and the central processor unit is programmed such it deduces data from a data signal received from the radio receiver and passes it to the data-processing device.

10 7. Device as claimed in any of the foregoing claims, wherein the radio receivers of at least two other node elements are arranged within the range of each radio transmitter of a node element.

15 8. Device as claimed in any of the foregoing claims, wherein a control device such as a computer is connected to the input/output member.

20 9. Application of the device according to the invention as claimed in any of the foregoing claims in horticulture, in particular glass horticulture, wherein an area for monitoring is provided with a pattern of sensors.

COMBINED DECLARATION AND POWER OF ATTORNEY
FOR A PATENT APPLICATION

ATTORNEY DOCKET NO. _____

As below named inventor, I hereby declare that: My residence post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one inventor is named below) or a joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

* Radiographic network

the specification of which is attached hereto unless one of the following boxes is checked:

- ☐ The Specification was filed on _____ and was assigned Serial No. _____ and was amended on _____
- ☒ was filed as PCT international application number PCT/NL00/00283 on 1-5-2000 and was amended under PCT Article 19 on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I do not know and do not believe that the invention was ever known or used in the United States of America before my or our invention thereof or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application, or in public use or sale in the United States of America more than one year prior to this application; that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application; and that no application for patent or inventor's certificate on said invention has been filed by me or my representatives or assigns in any country foreign to the United States of America, except as follows:

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below:

Prior Foreign Applications(s)			Priority	Claimed
<u>1011944</u>	NL (The Netherlands)	<u>04-29-1999</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
<u>1013444</u>	NL (The Netherlands)	<u>11-01-1999</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No

All Foreign Applications, if any, for any Patent or Inventor's Certificate Filed More Than 12 Months (6 Months for Designs) Prior To The Filing Date of This Application:

Country	Application No.	Date of Filing (Month/Day/Year)
_____	_____	_____
_____	_____	_____

I hereby claim the benefit under Title 35, United States Code, §120 of any United States Application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing Date)	(Status - patented, pending, abandoned)
_____	_____	_____
(Application Serial No.)	(Filing Date)	(Status - patented, pending, abandoned)

NOTE: Must be completed


I hereby appoint the following attorneys to prosecute this application and/or an international application based on this application and to transact all business in the Patent and Trademark Office connected herewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the attorneys identified below, unless the inventor(s) or assignee provides said attorneys with a written notice to the contrary.

1 Mark Zovko, Reg. No. 27849

Send Correspondence to: Mark Zovko
36504 28th Ave S.
Federal Way, WA 98003

Phone: (253) 838-1909

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

GIVEN NAME Reinder Eric	FAMILY NAME Nederhoed	Inventor's Signature 	Date 29-11-'01
Residence Koevordermeerstraat 1, 8531 RP, LEMMER, The Netherlands		Citizenship NL (The Netherlands)	
Post Office Address (Complete Street Address including City, State & Country) Koevordermeerstraat 1, 8531 RP, LEMMER, The Netherlands NLX			
GIVEN NAME	FAMILY NAME	Inventor's Signature	Date
Residence		Citizenship	
Post Office Address (Complete Street Address including City, State & Country)			
GIVEN NAME	FAMILY NAME	Inventor's Signature	Date
Residence		Citizenship	
Post Office Address (Complete Street Address including City, State & Country)			
GIVEN NAME	FAMILY NAME	Inventor's Signature	Date
Residence		Citizenship	
Post Office Address (Complete Street Address including City, State & Country)			
GIVEN NAME	FAMILY NAME	Inventor's Signature	Date
Residence		Citizenship	
Post Office Address (Complete Street Address including City, State & Country)			